OMPM2001 Result

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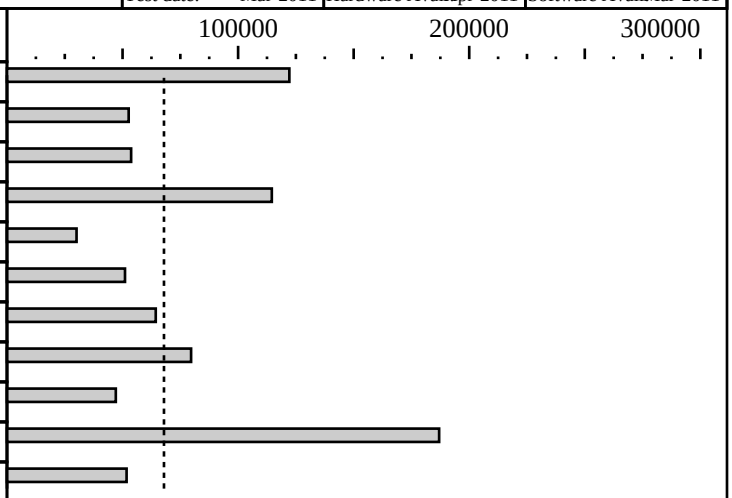
Cisco
B230 M2

SPECompMpeak2001 = --

SPECompMbase2001 = 67926

SPEC license #HPG9019 | Tested by: Cisco | Test site: -- | Test date: Mar-2011 | Hardware Avail: Apr-2011 | Software Avail: Mar-2011

Benchmark	Reference Time	Base Runtime	Base Ratio	Peak Runtime	Peak Ratio
310.wupwise_m	6000	49.1	122171		
312.swim_m	6000	114	52648		
314.mgrid_m	7300	136	53710		
316.applu_m	4000	34.9	114580		
318.galgel_m	5100	169	30093		
320.equake_m	2600	50.9	51057		
324.apsi_m	3400	52.8	64361		
326.gafort_m	8700	109	79655		
328.fma3d_m	4600	97.7	47079		
330.art_m	6400	34.2	186980		
332.ammp_m	7000	135	51745		



Hardware

CPU:	Intel Xeon processor E7-2870
CPU MHz:	2400
FPU:	Integrated
CPU(s) enabled:	20 cores, 2 chips, 10 cores/chip, 2 thread/core
CPU(s) orderable:	1,2
Primary Cache:	32KB(I)+32KB(D)/core on chip
Secondary Cache:	256KB/core (I+D) on chip
L3 Cache:	30720KB (I+D) on chip
Other Cache:	N/A
Memory:	128 GB (RDIMM 32x4-GB 1333 MHz)
Disk Subsystem:	LSI MRSASRoMB-8i (scsi)
Other Hardware:	

Software

OpenMP Threads:	40
Parallel:	OpenMP
Operating System:	SUSE Linux Enterprise Server 11.1, kernel 2.6.32.12-0.7-default x86_64
Compiler:	Intel C/C++ Compiler 12.0.2.137 for Linux Intel FORTRAN Compiler 12.0.2.137 for Linux GNU C Compiler 4.3.4
File System:	Linux ext3
System State:	Default

Notes/Tuning Information

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================================================================================
BIOS settings notes:
  Intel Hyper-Threading Technology (SMT): Enabled
  Intel Turbo Boost Technology (Turbo)  : Enabled (Max 2.8 GHz)

================================================================================
Extra Flags:
  318.galgel_m: -FI -132
  330.art_m: -DINTS_PER_CACHELINE=16 -DDBLS_PER_CACHELINE=8
  all: -gcc-name=/usr/bin/gcc

================================================================================
General Notes and Enviroment variables
  export KMP_LIBRARY=turnaround
  export KMP_STACKSIZE=31M
  export KMP_BLOCKTIME=infinite
  export OMP_DYNAMIC=FALSE
  ONESTEP=yes
  ulimit -s 64000

For compiler/openmp flags description please refer:
Intel-ic12.0-linux64-revB.html
```

Notes/Tuning Information (Continued)

Base optimization flags and enviroment variables:

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================================================================================
Medium:
  OPTIMIZE  = -O3 -xSSE4.2 -ipo -openmp
  COPTIMIZE  = -ansi-alias
  export OMP_NUM_THREADS=40
  export KMP_AFFINITY=compact,1
```